TETRA TECH

VIA E-MAIL

June 14, 2019

Mr. Christopher Smith
U.S. Environmental Protection Agency
5 Post Office Square
Mail Code OSRR07-4
Boston, MA 02109-3912

Ms. Jennifer McWeeney
Bureau of Waste Site Cleanup
Massachusetts Department of
Environmental Protection
One Winter Street, 7th Floor
Boston, MA 02108

RE: Per- and Polyfluoroalkyl Substances (PFAS) Field Sampling Plan and Quality Assurance Project Plan (QAPP)
W. R. Grace Superfund Site, Acton, Massachusetts

Dear Mr. Smith and Ms. McWeeney:

The attached Field Sampling Plan (FSP) is provided in response to EPA's March 14, 2019 Comment 10 regarding additional sampling for PFAS analysis in 2019 at the Grace Site. The EPA comment is:

> **10 Additional Note on 2019 Annual Sampling**. EPA is in the process of conducting a Five-Year Review (5YR) for the Site. EPA anticipates the 5YR will be complete in July 2019. Part of EPA's 5YR process is to evaluate the possible presence of emerging contaminants. In recent years, Per- and Polyflouroalkyl Substances (PFAS) have emerged as commonly found pollutants on former industrial sites. Given former operations and waste disposal practices at the Grace site, it is a virtual certainty that EPA's 5YR for the Site will conclude that PFAS must be sampled for.
>
> To avoid having to mobilize for a separate field event, Grace may wish to perform this sampling as part of the 2019 Annual Sampling Round. EPA is providing Grace with this information now so there is adequate time to create a sampling plan for PFAS. Grace should consider a subset of wells appropriate for sampling (i.e., source areas, sentinel wells), and submit a sampling proposal including updated/addended Field Sampling and Quality Assurance Project Plans. Grace shall provide the sampling proposal to EPA with adequate time for review and comment prior to the implementation of the sampling. There is an abundance of guidance available online relating to PFAS sampling. Grace may wish to refer to the MassDEP document "Interim Guidance on Sampling and Analysis for PFAS at Disposal Sites Regulated under the Massachusetts Contingency Plan".

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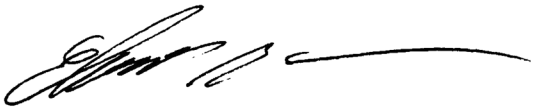
The Acton 2019 annual sampling event is currently planned to begin in August 2019. In accordance with the Standard Operating Procedure (Attachment A of the FSP) any PFAS sampling event will include clearing wells of any dedicated tubing or equipment at least 14 days before sampling for PFAS. The wells will then be purged using a PFAS-Free certified bladder pump or high-density polyethylene (HDPE) bailer. Personal protective equipment (PPE), equipment and specific procedures will follow the Standard Operating Procedure (SOP) in the attached Field Sampling Plan (FSP). Sampling and analysis will also follow guidelines in the attached QAPP Addendum.

The twelve (12) proposed wells target shallow wells downgradient from the source areas and will be completed as a "Phase 1" source sampling event. The proposed wells (green boxes around the well/well cluster) and the former source areas are shown on **Figure 1**. If the sum of PFAS concentrations exceed the USEPA's Draft RSL of 40 parts per trillion (ppt)(EPA, April 2019), then an appropriate sub-set of eight (8) shallow and deep unconsolidated screened sentinel wells will be sampled as a "Phase 2" sentinel sampling event, which will be scheduled following the results of the Phase 1 sampling. The sentinel wells are located hydraulically downgradient from source areas and proximal to groundwater discharge points as shown on **Figure 1** (blue boxes around the well/well cluster).

The MADEP June 19, 2018 Fact Sheet regarding sampling and analysis for PFAS at MCP-regulated disposal sites indicates that current MADEP guidance references the use of analytical method EPA Method 537 Rev. 1.1. (14 analyte list). This fact sheet, however, recognizes that this method is used for drinking water samples and does allow for consideration of other analysis methods. It should be noted that the newer method for drinking water samples is 537.1 which has the original 14 analytes and 4 "replacement" analytes. A pending USEPA "non-potable" method (EPA Method 8328) requires including the original 14 analytes plus 10 additional compounds. The proposed laboratory, Test America (Eurofins TestAmerica), uses a method that is an enhanced method 537.1 and would be compliant with the pending EPA method, as currently planned. This method is 537M Manual SPE and is applicable for non-potable water (groundwater and surface water samples) and includes isotope dilution to filter out potential interferences to improve accuracy. We propose to use Method 537M Manual SPE for analyzing the collected groundwater samples for PFAS analysis. The laboratory SOP for this method will be provided in Attachment A of the addendum to the existing Quality Assurance Project Plan (QAPP) for the Grace Site.

Please contact me at 978-303-8531 or Thor Helgason (781-642-8775) if you have any questions.

Sincerely,



Edward B. Dolan
Project Manager

CC:

Lydia Duff, Grace (*electronic only*)
Jack Guswa, JG Environmental
Thor Helgason, de maximis, inc.
Seth Jaffe, Foley Hoag (*electronic only*)
Paul Bucens, Grace (*electronic only*)
Barbara Weir, AECOM

Explanation

Grace Locations

- Monitoring Well Cluster
- Public Water Supply Well
- Former Recovery Well
- Recovery Well
- Decomissioned Recovery Well
- Non-Grace Recovery Well
- Former Reinjection Well

- Water Body
- Town Boundary
- Railroad
- Grace Property Boundary
- Proposed PFAS Sampling Location Phase 1
- Proposed PFAS Sampling Location Phase 2
- Contour (2018)

DRAFT

0 600 1,200 Feet

N

TITLE:	**Proposed PFAS Sampling Locations**
LOCATION:	W.R. Grace, Acton, Massachusetts
TETRA TECH	CHECKED: ED
	DRAFTED: JML
	DATE: 06/5/2019
	FIGURE: **1**